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8. A method for making an elastomeric device for electrically interconnecting two or more components, comprising the steps of:

embedding a plurality of magnetic particles, coated with a low melting point metal or alloy, in an elastomer by mixing the particles in the elastomer before the elastomer sets;

applying a magnetic field-to the particles so that the particles align themselves in electrically isolated columns;

heating the matrix sufficiently to fuse the low melting point coating; and polymerizing the elastomer to form an elastomeric matrix having one or more outer surfaces and comprising one or more electrically conductive pathways through the matrix.

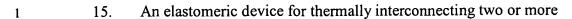
- The method of claim 8, wherein the uncured elastomer is coated on a 9. carrier that contains conductive pads.
- The method of claim 8, wherein the uncured elastomer is coated on a 10. carrier that contains one or more metal layers, the method further comprising the step of creating one or more electrically conductive pads that are electrically continuous with at least one electrically conductive pathway through the matrix.

- 1 11. An elastomeric device for electrically interconnecting two or more
- 2 components, comprising a matrix of electrically insulating elastomer that retains most of
- 3 its elasticity over a temperature range of at least 20°C to 75°C, containing an array
- 4 columns that are electrically conductive liquid over at least the upper range of the use
- 5 temperature of the device.
- 1 12. The device of claim 11, further comprising one or more electrically
- 2 conductive contact pads in electrical contact with said columns.

- 1 13. A method for making an elastomeric device for electrically
- 2 interconnecting two or more components, comprising the steps of:
- creating an array of low melting point metallic columns on a carrier; and
- laterally encapsulating said array in an electrically isolating elastomeric matrix.



- 1 14. A method for making an elastomeric device for electrically
- 2 interconnecting two or more components, comprising the steps of:
- 3 creating an array of openings in an electrically isolating elastomeric matrix; and
- filling the openings with a material that is an electrically conductive liquid over at
- 5 least the upper range of the use temperature of the device.



- 2 components, comprising a matrix of electrically insulating elastomer that retains most of
- 3 its elasticity over a temperature range of at least 20°C to 75°C, containing an array of
- 4 columns that include thermally conductive liquid metal over at least the upper range of
- 5 the use temperature of the device.